Washington Wildlife and Recreation Program

The Washington Wildlife and Recreation Program (WWRP) was created in 1990 and is administered by the Office of the Interagency Committee for Outdoor Recreation (IAC). The WWRP provides funding assistance for a broad range of land protection, park development, preservation, conservation, and outdoor recreation activities. In creating the program the Legislature found that "public acquisition and development programs have not kept pace with the state's expanding population," and, therefore, that it is "the policy of the state to acquire as soon as possible the most significant lands for wildlife conservation and outdoor recreation purposes before they are converted to other uses." (Chapter 79A.15 RCW)

General Statutory Provisions

As required by Chapter 79A.15 RCW, funds provided for the WWRP are distributed equally between the Outdoor Recreation Account and the Habitat Conservation Account. These accounts are divided into a several funding categories, each with its own statutory requirements. HB 1785 only requires the development of outcome-based performance measures for grants made through the Habitat Conservation Account.

The Habitat Conservation Account is divided into four categories:

- # 35 percent for the acquisition and development of **critical habitat** (available only to state agencies);
- # 20 percent for the acquisition and development of **natural areas** (available only to state agencies);
- # 15 percent for the acquisition and development of **urban wildlife habitat** (open to both local and state agencies); and
- # The remaining 30 percent is classified as **unallocated** and is distributed by the IAC to local and state agencies for high priority acquisition and development needs in the above categories.

"Critical habitat" is defined as: "lands important for the protection, management, or public enjoyment of certain wildlife species or groups of species, including, but not limited to, wintering range for deer, elk, and other species, waterfowl and upland bird habitat, fish habitat, and habitat for endangered, threatened, or sensitive species." (RCW 79A.15.010(3))

"Natural areas" are defined as: "areas that have, to a significant degree, retained their natural character and are important in preserving rare or vanishing flora, fauna, geological, natural historical, or similar features of scientific or educational value." (RCW 79A.15.010(5))

"Urban wildlife habitat" is defined as: "lands that provide habitat important to wildlife in proximity to a metropolitan area." (RCW 79A.15.010(8))

Before October 1 of each even-numbered year, the IAC board is required to recommend to the Governor a prioritized list of state agency and local projects for funding. The Governor may remove projects from the list, but may not add any. The Governor must then submit the list of projects as part of his or her capital budget request to the Legislature (Subsections (7) and (8) of RCW 79A.15.060).

Eligible Grant Recipients

Only state agencies are eligible for critical habitat and natural area grants, but both state and local agencies are eligible for urban wildlife grants. The program's primary participants are the Washington Department of Fish and Wildlife (WDFW) for critical habitat grants, and the Washington Department of Natural Resources (DNR) for natural area grants. A variety of eligible local agencies have sought urban wildlife habitat grants. Local agencies include counties, cities, towns, port districts, tribes, and park and recreation districts. A 50 percent match is required from local agencies.

Local and/or state agencies select proposed projects in a number of ways. Often, local citizen groups bring projects to the attention of an agency. In other cases, park and recreation professionals, conservation biologists, or land managers identify candidate properties for acquisition. Agencies then select the most important projects to submit to the IAC for funding. Property can only be acquired from willing sellers.

To be eligible for wildlife habitat grants, state and local applicants are required to have habitat conservation plans.² IAC staff review grant applications for consistency with eligibility requirements, technical completeness and consistency with the applicant's current strategic plan. The IAC relies primarily on its stakeholders, other agencies, and panels of technical experts to help screen and evaluate projects for funding.

At the state level, these strategic plans include the Washington Department of Fish and Wildlife's *Habitat Conservation and Outdoor Recreation Plan for IAC/SRFB*Competition (1998). The habitat portion of this plan is based on an earlier assessment called *Priority Habitats and Species* (1993). For natural area grants, the IAC relies on the Washington Department of Natural Resources' *Natural Heritage Plan* (1999). These plans are updated periodically.

-

²Not to be confused with Habitat Conservation Plans authorized under Section 10 of the federal Endangered Species Act.

To date, about two-dozen local agencies have received urban wildlife habitat grants. Few local jurisdictions appear to contain competitive parcels of land that meet the definition of "urban wildlife habitat." Counties sometimes have large contiguous land areas that comprise good quality habitat, but few urbanized jurisdictions do. Where parcels do exist the local community may not support restricting public use of those parcels for the benefit of wildlife. Most urbanized jurisdictions seek instead to protect generic "open space," which does not qualify for habitat funding, but may qualify for other sources of funding, such as the federal Land and Water Conservation Fund.

Funds Appropriation History

WWRP funding comes primarily from the sale of state general obligation bonds. The table below shows the funding appropriated by the Legislature for the Washington Wildlife and Recreation Program, and the distribution of these funds to the four habitat sub-categories for the current and two proceeding biennia.

WWRP Fund Appropriation History

	50 Percent	25 Dorgant	20 Dorgant	15 Percent	30 Percent For	
Biennium	For Habitat	35 Percent For CH	20 Percent For NA	For UWH	Unallocated	Total \$
1997-99	\$ 22,500,000	\$ 7,875,000	\$ 4,500,000	\$ 3,375,000	\$ 6,750,000	\$ 45,000,000
1999-01	\$ 24,000,000	\$ 8,400,000	\$ 4,800,000	\$ 3,600,000	\$ 7,200,200	\$ 48,000,000
2001-03	\$ 22,500,000	\$ 7,875,000	\$ 4,500,000	\$ 3,375,000	\$ 6,750,000	\$ 45,000,000

Note: The unallocated portion is distributed for high priority needs in the other three categories.

Agency Implementation of HB 1785

Consultation with Grant/Loan Recipients

The IAC has begun to facilitate discussions with the WDFW and DNR on the development of outcome-based performance measures and definitions of "success." Representatives of both state agencies were asked to develop a "value chain" or "logic chain" linking outputs (grant dollars, acres protected) with intermediate and final outcomes (natural areas, wildlife habitat, or species benefits). The purpose of this exercise was to identify the measures that would most clearly link investment to outcome, whether or not those measures were currently in use. The results of this exercise are shown in the table "A Value Chain for Habitat Grants" on page 49.

Once state agency clients have refined measures, the IAC and the Salmon Recovery Funding Board (SRFB) will contact a broader group of stakeholders for review and input. The broader group of stakeholders will be contacted in late summer or early fall of 2002. Once stakeholder review has taken place, the IAC Board will review the proposed output and outcome measures.

Consultation with Other Natural Resource Agencies

Individual agencies other than the WDFW and DNR have not been contacted by the IAC. Three meetings of the agencies affected by HB 1785 were held in the fall and winter to share information; two were convened by OFM and one was convened by the Department of Ecology.

Outcome-Focused Performance Measures

For habitat grants the IAC currently tracks output measures including:

- ∉# Dollars spent;
- ∉# Grants awarded; and
- # Acres of habitat protected.³

As a grant management agency, IAC is able to track projects in a number of different ways: by fund category, recipient, type of project, activity status, geographic area, etc. The IAC is also beginning to collect outcome data, i.e., the species and habitat elements addressed by proposed property acquisitions.

State statute guiding the WWRP habitat grant program clearly defines "success" as the acquisition of habitat before the land is converted to other uses (RCW 79A.15.005). Judging by its legislative standard, the grant program can be deemed successful in that tens of thousands of acres of land have been protected since 1990 that otherwise would have been converted to non-habitat use. The more fundamental question is whether these lands have made a positive difference for the species they were intended to protect. There are two potential approaches to measuring the success of the Habitat Conservation Account: one way might be the del-listing of species under the federal and state endangered species acts; the other might be the status of wildlife and plant species as a whole.

Both of these approaches are problematic, however. The purpose of the habitat grant program is preventing the extirpation of a known population or, in some cases, the extinction of a species. Habitat acquired under this program has protected known populations of at least three listed wildlife species in Washington: the Western pond turtle, the sharp-tailed grouse, and the pygmy rabbit. Habitat acquisition also has protected winter range for deer and other vital habitat elements.

However, habitat may be only one factor in the recovery of a species. In the case of delisting of bald eagles, habitat protection and a prohibition on the use of DDT were both factors in recovery. Other factors affecting listed species recovery include fire, which may delay recovery for years. Even with protected habitat, decades may be required for

³ "Acres of habitat" protected could also be considered an "intermediate outcome" measure.

de-listing to occur. Therefore, while there is probably a correlation between the acquisition of habitat and the de-listing of species, it would be difficult to demonstrate.

As to whether property acquisition helps wildlife or natural communities as a whole, it is critical to remember that habitat acquisition and restoration are only part of the solution. While some existing habitat is protected through acquisition, many other lands that provide habitat continue to be converted and developed for human purposes. Therefore, the investment of money into habitat does not (and should not be expected to) provide a net habitat or net population increase; rather, it avoids a decrease, or as much of a decrease as would occur without the acquisition.

Nonetheless, the original reasons for creating the Habitat Conservation Account are still valid today. There are still many listed species that would benefit from habitat protection, and there are always more applications for available funds than there are funds available. In addition, habitat acquisition or other forms of permanent habitat protection are needed for de-listing of species under the federal and state endangered species acts.

Development of New Outcome Measures

Recognizing the intent of the audit and of the particular role of the IAC, an attempt was made to outline the sequence of outcomes involved in funding acquisition for habitat protection. The table below presents a "value chain" that shows the intermediate steps between grant awards and final outcomes.

A Value Chain for Habitat Grants

Program WWRP	Habitat Grants
Specific Process or Activity	Habitat Grants awarded to project sponsors
We are doing this so that	Project Sponsors have financing
as measured by	∉# Number of grants issued ∉# Number of projects ∉# Dollar value of grants
We want this to happen so thatas measured by	Project Sponsors protect land
	 Number of acres under easement

Specific Process or Activity	Habitat Grants awarded to project sponsors		
We want this to happen so that	Critical habitat, natural areas, and urban habitat are protected		
as measured by			
	∉ Populations of urban wildlife species are stabilized or increased		
We want this to happen so that	Viable wildlife populations and native ecosystems are protected and maintained for current and future generations		
as measured by			

Measures and indicators are presented for discussion purposes only.

The value-chain begins with administrative outputs (numbers of grants, number of projects, and dollar value of grants), proceeds through intermediate outcomes (e.g., no net loss of, or increase in, numbers of populations and of individuals within those populations for species of concern), and ends with final environmental outcomes (e.g., the long-term viability of the full range of Washington's native biodiversity). Also included in this table are monitoring indicators (bulleted phrases) that could help measure the state's success in achieving each identified output and outcome measure. This table is presented as an exercise only; more work is needed to refine these measures and indicators.

The first challenge in implementing performance measures is determining which entity should monitor which steps of the process. The question is which outcomes are appropriately measured by a grant-making agency such as the IAC and which are better suited for measurement by natural resource or land management agencies. Specifically, there is a distinction between the IAC which has been created to distribute money to other entities that, in turn, have discretion for determining management priorities, and other grant-providing agencies, such as the Department of Ecology, that are charged with implementing actions defined in a number of environmental laws and through performance agreements with the federal Environmental Protection Agency. In Ecology's case, grants to local entities are a means, among others, for achieving non-discretionary (i.e., mandated) ends, such as compliance with water quality standards. IAC's role in environmental outcomes appears intended to be less direct than that of its grantees or of other grant agencies.

Another question is the kind of outcome measures that should be gauged by the IAC. The intent of HB 1785 and of the audit recommendations made by the Joint Legislative Audit and Review Committee, however, is to examine the effectiveness of grant

programs "in financing projects with high environmental quality returns." Therefore, the focus of the outcome measures to be developed under HB 1785 will be on environmental quality.

Both WDFW and DNR identified the protection of *biodiversity*⁵ and economic efficiency as the final outcomes that are being served by land acquisition. The work to be done is in developing consistent definitions of "intermediate outcomes." Although there is no substantive disagreement between the agencies, the selection of outcome measures depends upon being able to agree on consistent definitions and wording to describe the real world outcomes that are expected through land protection and restoration.

Once final and intermediate goals (or "success") have been defined, outcome-based performance measures, such as "targets" (e.g., a specified amount of progress in a given amount of time) or "benchmarks" (i.e., standards) can be adopted to assist managers in tracking progress. Monitoring then allows managers to determine not only the "status and trend" of environmental indicators, but the extent to which they have reached their management targets or benchmarks. Once these performance measures and monitoring indicators are in place, the IAC and its client agencies will consider a process for evaluating monitoring data and adapting the grant program as needed.

The IAC and its agency clients will continue to work together to develop the most appropriate outcome-based measures to evaluate the performance of the habitat grant program. They will also collaborate on methods to monitor, evaluate, and document progress. By early next year (2003), intermediate outcome measures should be agreed to by stakeholders and presented to the Board of the Interagency Committee for Outdoor Recreation for review and approval. The next step will be to incorporate these measures into grant application materials.

In the interim, the IAC has begun to collect additional information in anticipation of the need to better measure outcomes. Grant applicants have been asked to fill out a new section of the habitat grant application that identifies:

- # The species or community supported by the proposed acquisition, or the habitat type proposed for acquisition;
- # For relevant "special status animal species," the life support function or species use provided by the habitat of interest, such as "breeding, feeding, migration, resting, perching, roosting, wintering, rearing, spawning, year-round resident, individual occurrence, or unknown;"
- # The listing status of species, communities, and habitats; and
- # The source of that information (whether federal or state).

These data will allow the IAC to identify trends regarding the types of species and habitats that are theoretically being protected through these acquisitions.

.

⁴ Joint Legislative Audit and Review Committee, *Investing in the Environment*, Report01-1, p 11.

⁵ Generally defined as "the variety of life and its processes"

New Initiatives

Although the IAC is taking action now to implement HB 1785, several initiatives are underway that could influence the development of performance measures. Recognizing that native biodiversity continues to be threatened in Washington, the WDFW has begun to consider alternative approaches for protecting biodiversity. It is working with The Nature Conservancy and DNR's Natural Heritage Program on a pilot project called "ecoregional planning." This planning process takes a comprehensive view of all species found within an "eco-region," which is a large geographic area of the state that shares common physical features, climatic conditions, and vegetation patterns (there are eight eco-regions in Washington). Rather than a species-by-species approach, eco-regional planning seeks to protect assemblages of species and their habitats *before* they reach a critical state, and to be more strategic in identifying conservation priorities.

Once species diversity and abundance have been assessed, a conservation plan is written in which the department works with local governments and private landowners to leverage conservation opportunities. Rather than using a single tool to address its objectives, such as land acquisition by public agencies, the plan would encourage the use of multiple tools, including regulation and landowner incentives. While it is too early to say whether eco-regional planning will be adopted by the state, such planning holds the promise of more clearly linking investment to final outcome.

A related effort is the development of the biodiversity conservation strategy required under SB 6400 (Chapter 287, Laws of 2002). This new law calls for the creation of a biodiversity conservation committee comprised of representatives of state, federal, and local governments; tribes; property owners; business; academia and research institutions; and non-governmental conservation organizations. The committee is to develop recommendations for a coordinated strategy that conserves Washington's remaining functioning ecosystems and restores the habitats needed to maintain the state's biodiversity. A final report describing the strategy is due to the Governor and Legislature by October 1, 2003.

While the pilot eco-regional planning process addresses the development of a technically sound and economically efficient approach for identifying and protecting conservation targets, SB 6400 addresses the political and institutional foundation needed to support a comprehensive and coordinated biodiversity conservation strategy.

Recommendations for a Monitoring Program

Fish and wildlife management is currently centered on a species-by-species approach. Monitoring is therefore conducted only for certain plant and animal species of concern or interest to the departments of Natural Resources, and Fish and Wildlife. WDFW monitors the status of species of concern by sampling populations across the range of their distribution in Washington to determine if they are increasing, declining or stable. Monitoring is not done to determine the health of ecosystems or the status of biodiversity because it is expensive and difficult to correctly design and implement. The current interest in biodiversity conservation planning, however, may mean that monitoring will be refocused or enhanced to reflect new priorities. For example, The Nature Conservancy is in the process of developing an integrated system of performance measurement and monitoring intended to be used in conjunction with eco-regional conservation planning.

Because a limited amount of money is available for monitoring, natural resource agencies do not tie monitoring of plant and animal species to acquisitions and the funding sources used to acquire habitat. Natural resource agencies focus monitoring activities on the highest priority species regardless of where they are found. For example, DNR's Natural Heritage Program determines monitoring priorities with a ranking index that combines species rarity, type of threat faced by the species, and immediacy of threat. Moreover, many parcels of land are acquired with a combination of funding sources. This makes it difficult for natural resource agencies to align monitoring with funding sources used to acquire habitat.

Developing an enhanced monitoring system is currently under consideration by IAC. IAC uses a data management system called PRISM to manage the data for its grant programs. PRISM stores a great deal of project information, and the program is constantly being enhanced and updated. It also has proven to be a credible and popular project information management system as other organizations have purchased versions of the software. PRISM also has the potential to be used as a repository for project monitoring information.

Because the IAC is not a natural resource management agency, it does not conduct "status and trend" monitoring of resource conditions. As a grant agency, however, it could require "effectiveness" monitoring by grant applicants. For example, if a grant objective is to provide continued habitat for an amphibian, the IAC could require that the amphibian population be monitored according to a plan agreed to at the time of the grant award, and the information data could be provided to the IAC. One issue is length of time to monitor. "Viability of species" has often been defined in terms of persistence over decades. One way to ensure any appropriate monitoring is conducted by grantees would be to create a special monitoring account that is drawn upon when field studies are required. This could allow the IAC to more clearly show the success of particular projects over time. The monitoring objective could be twofold: (1) To determine the condition of the acquired habitat, and (2) To ensure the species of interest is still making

use of the property. Note that, under this approach, the IAC's interest would be in the utilization of the *acquired habitat*, rather than in the status of the *species* as a whole.

The IAC could also document the results of the habitat grant program by requesting information already collected by its client agencies. For example, WDFW is able to link the WWRP funding it receives to the numbers of acres of particular kinds of priority habitat or of habitat for particular priority species. WDFW tries to update these data on a biennial basis. WDFW also maintains a transactions database which tracks IAC/SRFB contract numbers, geographic site names, number of parcels, landowners, acres, status of transactions, etc.

The Department of Natural Resources also tracks output and outcome information in two separate databases: one for transactions, and the other for biological resources. Transaction information links grant dollars to geographic sites, number of parcels, and number of acres. The Natural Heritage database contains information about the state's biodiversity. The transaction and natural heritage databases are maintained separately because they address different subjects and because multiple sources of funding are sometimes used to acquire a given site. Linkage of the two databases can easily be accomplished, however, so that WWRP grant dollars can be tracked from property to parcel to site, then to "element," such as a plant or animal species, or natural community.

The outcomes of the salmon recovery monitoring strategy currently under development could also play a role in an enhanced monitoring system. As required by SB 5637 (Chapter 298, Laws of 2001), the strategy focuses on water quality (including selected biological indicators), water quantity, aquatic habitat, and salmon. The strategy is to develop a monitoring template that could be adapted for monitoring of upland plant and animal species. Most of the monitoring proposed under SB 5637 is "status and trend" monitoring of resource conditions. Therefore, some of the large scale monitoring indicators being considered for watershed monitoring could also be helpful in upland fish and wildlife status and trend monitoring, particularly riparian condition, land use/land cover, and road density. These indicators could be monitored with a combination of remote sensing (aerial photos) and field surveys.

In addition, monitoring under SB 5637 proposes to use "probabilistic sampling" of selected indicators, including salmon-spawner abundance. "Probabilistic sampling" needs to be statistically rigorous, but allows the detection of trends using a subset of indicators and sample sites. This kind of design could also be used to monitor the abundance of certain upland plant and animal species.

A full-scale upland plant and animal species monitoring program would require consideration of multiple factors including: temporal and spatial scales (sample designs), indicators, metrics, baseline studies, protocols, data management, analysis and evaluation, and roles and responsibilities. Until these many issues are sorted out, monitoring activities should be scaled to the most easily obtained and most critical information needed.

Barriers to Fully Implementing HB 1785

Several barriers to developing and using outcome-based performance measures have been identified so far. These barriers include the lack of resources to develop baselines of species status and to monitor the results of investments. It is difficult for the IAC (or its client agencies) to have a high degree of confidence that proposed acquisitions are the most significant for wildlife and natural communities when baseline data are often lacking. The best way of increasing "investor confidence" is to ensure the availability of better status and trend information for wildlife and plant species, and natural communities.

Another barrier is the lack of a coordinated statewide perspective on habitat conservation. Existing fish, wildlife, and natural area conservation programs are based on different legal authorities and conducted by different agencies. These programs have different objectives and manage information in numerous ways. Both The Nature Conservancy's eco-regional planning efforts and the biodiversity strategy called for under SB 6400 attempt to address these shortcomings.

Before a monitoring program can be developed, the IAC and its state agency clients need to determine the type of monitoring that will be needed, and how the data will be collected, analyzed and reported. In addition, consideration should be given to the resources that would be required to start up and to sustain data collection over many years.

If the ultimate measure of success of the Habitat Grant Program is making a positive difference for wildlife and natural communities, then a potential barrier to acquiring the most significant land for wildlife and natural communities may be the requirement for matching funds. Some local jurisdictions may not be able to meet this requirement and this could constrain the acquisition of the best habitat available. Finally, the occasional unwillingness of landowners to sell "in-holdings" (i.e., private parcels surrounded by or adjacent to publicly owned land) sometimes prevents a proposed conservation area from returning to pristine or nearly pristine condition.

Salmon Recovery Grants

The State of Washington has adopted a two-pronged approach to salmon conservation. In 1999, the Governor adopted a salmon recovery strategy focused on state agency activities. Also in 1999, legislation was passed creating a Salmon Recovery Funding Board (SRFB) to distribute state and federal funds for salmon habitat protection and restoration, and related programs and activities. The primary role of the Board is to fund the best available salmon habitat projects and activities based on prioritized lists developed by local organizations called lead entities.

The SRFB comprises five gubernatorial appointees who are voting members, and five non-voting state agency directors. One of the voting members must be a Cabinet-level representative of the Governor. Agency members are the Departments of Ecology, Fish and Wildlife, Natural Resources, and Transportation, and the State Conservation Commission. The Office of the Interagency Committee for Outdoor Recreation and Salmon Recovery Funding Board (IAC/SRFB) provides administrative support to the SRFB.

General Statutory Provisions

Chapter 77.85 RCW, created the Salmon Recovery Funding Board and guides its operations.

Eligible Grant Recipients and Activities

All local salmon recovery projects must be proposed on project lists prepared by lead entities. Lead entities are organizations of local or regional groups, including cities, counties, tribes, nonprofit organizations, and others that create citizen-based committees to prioritize habitat project lists. Habitat project lists are submitted to the SRFB for review and funding. As of April 2002, there were 26 lead entities.

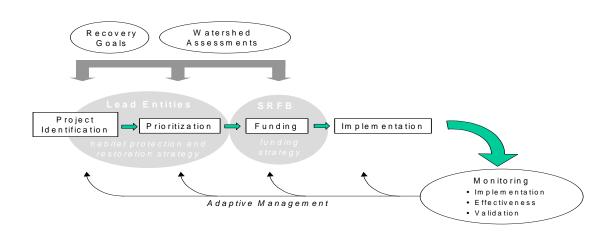
Although the lead entity works with sponsors to develop a project list, it is usually not the organization responsible for grant administration or project implementation. Rather, the SRFB contracts directly with successful applicants. Project sponsors can be local governments, non-profit entities, and others.

In general, projects funded by the SRFB address habitat protection and restoration. Typical projects include in-stream or riparian restoration, such as streamside plantings or channel improvements; purchase of fee or less-than-fee interests in land, often combined with restoration; and fish passage barrier removal. The Board also funds targeted assessments and feasibility studies to help lead entities improve their ability to identify and prioritize the best projects.

Together, the lead entity and SRFB processes provide the means to identify the most important habitat protection and restoration projects in a watershed and to prioritize those

projects for funding and implementation. The Board provides lead entities with guidelines and criteria for strategy development and project identification and ranking. The lead entities in turn provide prioritized lists of projects for SRFB evaluation and funding. This process, guided by recovery goals and watershed assessments, is diagrammed below.

Ideal Process used in Funding Salmon Habitat Projects



It should be noted that some of the pieces of this process are not yet in place, but are in development: Recovery goals are being developed by the National Marine Fisheries Service in conjunction with regional recovery boards; A comprehensive monitoring strategy is being developed under SB 5637 (Chapter 298, Laws of 2001) and lead entities are in the process of developing watershed assessments and restoration strategies.

Funds Appropriation History

Although created in 1999, the Salmon Recovery Funding Board did not begin distributing funds until 2000. The table below shows the state and federal funding distributed by the *state* (including WDFW, the Governor's Salmon Recovery Office, and SRFB) over the past two biennia.

Project-Related Salmon Recovery Funding in Washington (1999-2003)

	State	Federal
Biennium	Funds	Funds
1999-01	\$36,655,000	\$67,605,752
2001-03	\$28,988,000	\$34,000,000

Agency Implementation of HB 1785

Consultation with Grant/Loan Recipients

The proposed process for developing outcome-focused performance measures includes staff development of draft measures, followed by review by grant and loan recipients. A preliminary briefing was held for the Lead Entity Advisory Group (LEAG) in December 2001, but few people attended. A briefing was also held for the state's project Technical Review Panel. Draft measures are nearing completion and will be circulated for review. The LEAG, the Technical Review Panel, regional salmon recovery board members and other stakeholders will be consulted during the fall of 2002 while draft performance measures are being developed. Public input will also be taken in early 2003 before the SRFB adopts final measures.

Consultation with Other Natural Resource Agencies

State agencies represented on the Salmon Recovery Funding Board have received information about implementation of HB 1785, and the Board has agreed to schedule time at one of its regular meetings to discuss performance measures. The issue is of great interest to the Board, which is expected to be able to communicate the results of investing in salmon recovery to a wide variety of audiences.

Outcome-Focused Performance Measures

In addition to the usual project *output* measures, such as project status and geographic location, the SRFB historically tracks the type of project funded (e.g., fish passage barrier removal), the number of projects funded by type, and the amount of money spent by counties and lead entities. The SRFB also tracks a few *outcome* measures, including the salmon species targeted for assistance and the "habitat element" that will be addressed by the project.

The SRFB has grouped and tracks similar types of projects (outputs) into the following categories:

- ∉# Acquisition;
- ∉# In-stream Diversion;
- ∉# In-stream Passage;
- ∉# In-stream Habitat;
- ∉# Riparian Habitat;
- ∉# Upland Habitat; and
- ∉# Estuarine/Marine Near-shore.

Development of New Outcome Measures

Recognizing the intent of the Joint Legislative Audit and Review Committee report on *Investing in the Environment*, and of the particular role of the SRFB, an attempt was made to outline the sequence of outcomes involved in funding salmon recovery projects. The table below presents a "value chain" that begins with administrative outputs (numbers of grants, number of projects, and dollar value of grants), proceeds through intermediate outcomes (e.g., number of fish passage barriers removed and acres or stream miles of habitat opened), and ends with final environmental outcomes (e.g., de-listing of salmon populations). Also included in this table are monitoring indicators (bulleted phrases) that could help measure the state's success in achieving each identified output and outcome measure. This table is presented as an exercise only; more work is needed to refine these measures and indicators.

A Value Chain for Salmon Recovery Grants

Program	Activity	
SRFB	Salmon Recovery Grants	
Specific Process or Activity	Salmon Recovery Grants awarded to project sponsors	
We are doing this so that	Project Sponsors have financing	
as measured by	∉# Number of grants issued	
	∉# Number of projects	
	∉# Dollar value of grants	
We want this to happen so that	Project Sponsors reduce mortality and restore habitat	
	∉# Number of diversions screened	
as measured by	⊯ Number of fish passage barriers removed/Acres of habitat opened	
	∉# Percent riparian miles protected	
	∉# Percent in-stream habitat restored	
	∉# Increase in habitat area and capacity	
We want this to happen so that	Salmon populations are abundant, productive, genetically diverse, and spatially distributed	
as measured by		
	∉# Number of spawners	
	∉# Number of juvenile migrants	
	∉# Age composition and size	
	∉# Increase in occupied range	
We want this to happen so that	We have healthy and harvestable levels of salmon in	
	perpetuity	
as measured by	∉# De-listing of salmon populations	
	∉# Sustainable salmon harvests	
	∉# Distribution of marine-derived nutrients throughout	
	watersheds	

Measures and indicators are presented for discussion purposes only.

The first step in developing new outcome measures is to ask, "where do we want to go;" that is, to identify the state's salmon recovery goals and objectives. The ultimate goals of investing in salmon recovery are fully described in the Statewide Strategy to Recover Salmon and may be summarized as:

- # The increased abundance, productivity, diversity, and spatial distribution of all salmon species;
- # A growing percentage of healthy wild stocks, and de-listing of all endangered salmon species;
- ∉# Abundance of salmon for harvest;
- # Healthy watershed conditions;
- # Supportive communities; and
- # Integration and consistency between salmon recovery, community and economic development, natural resource practices, and other community interests.

Before the ultimate goals of salmon recovery can be achieved, progress is demonstrated by reaching intermediate outcomes such as:

- # Expanded involvement of local governments, tribes, and citizens in developing salmon recovery goals and plans for each region goals that address all water uses and continued prosperity of the region;
- # A clear structure for integrating harvest, hatchery and habitat conditions;
- # Inclusive involvement of stakeholders at the watershed level in habitat conservation, preservation, and restoration projects;
- # Comprehensive assessments of habitat conditions in each watershed;
- # Locally developed watershed strategies that list all priority habitat actions and target areas are developed or underway;
- # Implementation of the most important conservation, preservation, and restoration actions in each watershed, with active local support;
- # Implementation of the Forest and Fish Agreement for forest practices, and similar efforts to address agricultural issues;
- # Funding necessary to support the development of goals, plans, and implementation of projects;
- # Improved conditions for fish, measured by indicators such as fish access to blocked habitat, improved riparian conditions, acres of key habitat protected, or volume of water restored; and
- # Recovery actions are adjusted as monitoring information and new science becomes available.

Note that these outcomes cover a variety of measures, and are not intended to be measured by the SRFB alone. Rather, the variety of outcomes identified is an indication of the need for coordinated performance measurement and monitoring.

Before these intermediate outcomes can be reached, however, continued work is needed on "capacity building:"

- # Development of recovery goals for all salmon species in each region;
- # A plan that integrates all "H" factors (habitat, harvest, hydropower, and hatcheries);
- # Clear and strong community support for actions, and a timeline to meet the goals;
- # Adequate funding to support actions on the timeline;
- # A monitoring system to measure success; and
- # Enforcement of resource protection standards.

In addition, the SRFB will examine the usefulness of the Salmon Recovery Scorecard. The Scorecard was developed by the Governor's Office in May 2000 to measure progress toward implementing the State's Salmon Recovery Strategy. The scorecard is based on the "balanced scorecard" approach developed by researchers at Harvard College, which seeks to integrate various kinds of output and outcome measures to align the separate divisions within a corporation toward the same goals and objectives. This model was adopted in Washington to align the activities of state agencies involved in salmon restoration or habitat management toward achievement of the state's salmon recovery strategy. In particular, the scorecard is viewed as useful in integrating the three spheres of human activity: social, economic, and environmental.

Existing and proposed objectives provide solid direction to the SRFB in developing a system of performance measurement and monitoring under HB 1785. Currently, the SRFB is developing options for expanding performance measures related to salmon recovery grants. It is anticipated that draft measures will come before the SRFB for review in November of 2002 with final adoption in early 2003. These measures would then be incorporated into grant materials by mid-2003.

Recommendations for a Monitoring Program

The SRFB uses a data management system called PRISM to manage the data for its grant programs. PRISM stores a great deal of project information, and the program is constantly being enhanced and updated. It also has proven to be a credible and popular project information management system in that other organizations have purchased versions of the software. PRISM also has the potential to be used as a repository for project monitoring information.

In addition to existing efforts, a separate interagency project is engaged in the development of a comprehensive monitoring strategy for "watershed health with a focus on salmon recovery," as required by SB 5637. The strategy focuses on water quality

(including selected biological indicators), water quantity, aquatic habitat, and salmon. Most of the monitoring proposed under SB 5637 is "status and trend" monitoring of resource conditions. As with any monitoring program, consideration must be given to: temporal and spatial scales (sample designs), indicators, metrics, baseline studies, protocols, data management, analysis and evaluation, and roles and responsibilities.

The strategy proposes to fill gaps in current monitoring so that the state has a more complete picture of the health of its watersheds and wild salmon populations. The strategy also proposes to align the collection of monitoring data with identified management questions. In addition, other mechanisms will be proposed to evaluate and report information to appropriate decision makers. The required *State of the Salmon* report provides an excellent mechanism for "forcing" better interagency coordination. One of the most challenging aspects of developing a monitoring program will be ensuring its long-term viability. Most status and trend monitoring, particularly for salmon and watershed health, requires years of data.

A report describing the comprehensive monitoring strategy will be provided to the Governor and Legislature by December 1, 2002. This report will include recommendations for project monitoring and will be used as blueprint for future monitoring efforts.

Barriers to Fully Implementing HB 1785

At this point, principal barriers to adopting outcome-based performance measures for salmon recovery grants concern the ability to reach agreement on those specific measures among the many groups interested in salmon recovery. The WDFW and SRFB recently sponsored a workshop for lead entities that was designed to encourage them to learn how to develop habitat restoration strategies. This effort was one step among many that are required to help build capacity at the watershed and region levels so that locally developed plans and strategies can be used to guide and monitor progress. A challenge – although not necessarily a barrier – is developing all of the aspects of a salmon recovery and habitat restoration program before goals and objectives are fully known and widely adopted. In fact, many recovery planning performance measures (i.e., population targets) will be developed at the region level in conjunction with Technical Recovery Teams convened by the National Marine Fisheries Service.

Another issue concerns roles and responsibilities surrounding accountability for achieving objectives and performance measures. The state should agree on a vision for achieving watershed restoration and salmon recovery and on the broad outlines for achieving that vision. The roles and responsibilities of the state, salmon recovery regions, and of watershed groups need to be clearly defined. Again, this is not necessarily a barrier, but it is a large task, and one that will require agreement among state agencies.

Secure and long-term funding for monitoring is a critical component of measuring outcomes, and presents a potential barrier to fully implementing HB 1785 and the

Comprehensive Monitoring Strategy. Without monitoring, it is not possible to say whether outcomes, particularly environmental outcomes, have been achieved. The Comprehensive Monitoring Strategy is currently examining funding options.

Interagency Committee for Outdoor Recreation